CLAIMS

What is claimed is:

1. A method for providing network security, comprising the steps of:

receiving a plurality of network protocol packets, wherein a network protocol packet includes a network protocol header and a plurality of network protocol data, and wherein the network protocol data include a first cryptographic protocol header and a first plurality of encrypted data;

determining a first plurality of cryptographic protocol rules associated with the network protocol data;

establishing a cryptographic session, if required by said first cryptographic rules;

applying the first plurality of cryptographic protocol rules to the first encrypted data to obtain a first plurality of cleartext data;

translating the first plurality of cleartext data into a second plurality of cleartext data in accordance with at least one translation rule; and

encrypting the second plurality of cleartext data in accordance with at least one rule associated with a second cryptographic protocol, resulting in a second plurality of encrypted data.

2. A system for providing network security, comprising:

an input module for receiving a plurality of network protocol packets;

a translation module for translating a first plurality of data into a second plurality of data;

an output module; and

a cryptographic module responsive to the input module and the output module for performing cryptographic operations.

3. A system for providing network security, comprising:

means for receiving a request to perform a cryptographic operation;

means for returning a response to the cryptographic operation request;

at least one module for performing said cryptographic operations.

4. The method of claim 1, wherein the at least one translation rule is predetermined.

5. The method of claim 1, wherein the at least one translation rule is determined dynamically.

6. The method of claim 1, wherein the first cryptographic protocol is WTLS.

7. The method of claim 1, wherein the first plurality of encrypted data is associated with WML.

8. The method of claim 1, wherein second plurality of encrypted data is associated with HTML.

9. The method of claim 1, wherein the second cryptographic protocol is SSL over HTTP.

10. The method of claim 1, wherein the first cryptographic protocol and the second cryptographic protocol are identical.

11. The method of claim 1, wherein the first plurality of encrypted data and the second plurality of encrypted data conform to different revisions of a specification for the same cryptographic protocol.

12. The system of claim 3, wherein at least one cryptographic module is a cryptographically strong pseudorandom number generator.

13. The system of claim 3, wherein the cryptographic operations are performed using cryptographic acceleration hardware.

14. The system of claim 13, wherein the cryptographic acceleration hardware includes a plurality of individual hardware acceleration units.

15. The system of claim 14, wherein at least one individual hardware acceleration unit is dedicated to one function.

16. The system of claim 13, wherein the cryptographic acceleration hardware is updateable by loading at least one cryptographically signed instruction.

17. The system of claim 13, wherein the cryptographic acceleration hardware is tamper-resistant.

18. The system of claim 13, wherein the cryptographic acceleration hardware is tamper-evident.